

STATE OF MONTANA MONTANA DEPARTMENT OF TRANSPORTATION JOB PROFILE

-1-	□	Update Forma	e I Review
			Date Submitted
SECTION I - Identification			
Working Title: District Environmental Engir Specialist	neering		Department: Transportation
Job Code Number: 172556			Division & Bureau: Rail, Transit, and Planning Division Environmental Services Bureau
Job Code Title: Civil Engineering Specialis	t		Section & Unit : Environmental Engineering Section
Pay Band: 6			Work Address: Glendive District Office
Position Number: 91998			Phone: 406.345.8266
FLSA Exempt FLSA Non-Exemp	ot	V	Non-Union MPEA Blue Collar
Profile Completed By:			Work Phone:

Heidy Bruner, P.E., Engineering Section Supervisor 406.444.7203 Thomas S. Martin, P.E., Environmental Services Bureau Chief 406.444.0879

Work Unit Mission Statement or Functional Description:

Environmental Services Bureau (ESB) mission for MDT is to be the expert regarding all environmental issues, concerns and opportunities. The ESB provides guidance to all Divisions and the Director's Office to ensure compliance with environmental laws, rules, regulations, policies, orders, and agreements. The ESB identifies and evaluates potential impacts of transportation construction and maintenance activities on natural, social, and economic resources and recommends measures to avoid, minimize, or mitigate such impacts in compliance with applicable local, state, federal, and tribal regulations and policies. Resources evaluated by ESB include those pertaining to fish, wildlife, vegetation, wetlands, water resources, water quality, historic, cultural, archaeological, paleontological, hazardous and solid waste, erosion and sediment control, air quality, noise, visual, social, economic.

The Environmental Engineering Section plays an integral part in ensuring that MDT's work is conducted in accordance with laws such as the National Environmental Policy Act (NEPA), Montana Environmental Policy Act (MEPA), Clean Water Act (CWA), Montana Water Quality Act, and applicable MDT and Federal Highway Administration (FHWA) rules, standards and guidelines to accomplish the

project development goals and objectives of MDT. The Section maintains a high level of knowledge, skill, and ability in applying these laws to MDT's activities: preconstruction, planning, construction, maintenance, aviation, motor carriers, and facilities. The Section coordinates with planning, design, maintenance, and construction, and develops policies, guidelines, and procedures to ensure that all MDT projects meet the requirements of NEPA, MEPA, the CWA, and other applicable federal, state, and local laws.

Describe the Job's Overall Purpose:

This position is commonly referred to as the District Environmental Engineering Specialist (DEES). The DEES serves in the District for the Engineering Section of the ESB. This position is responsible for implementing MDT's erosion and sediment control, storm water, construction, and maintenance environmental permitting and compliance activities and programs at the District level to ensure compliance with local, State, Federal and Tribal regulations. This position is responsible for assisting with the development and delivery of environmental compliance and stewardship training programs. This position provides training for district field staff; contractors; other MDT work units; and other local, state, and federal agencies in accordance with ESB policy. This position exercises solid environmental engineering judgment coupled with accurate interpretation of environmental laws. This position directly reports to the Environmental Engineering Section Supervisor (EESS) for work prioritization, policy, and procedures. The District Administrator (DA) or District Preconstruction Engineer provides indirect supervision and occasionally provides work prioritization to the DEES on urgent/high priority projects. This position will be accountable to both the District and the EESS for their daily activities including time accountability. The DEES routinely coordinates with the Field Services Engineer (FSE) regarding technical and ESB policy matters. This position does not supervise other agency personnel.

SECTION II - Major Duties or Responsibilities

% of Time

A. <u>CONSTRUCTION ENVIRONMENTAL COMPLIANCE ASSISTANCE</u> 40%

- 1. This position provides professional and technical assistance, guidance and recommendations to district staff, Engineering Project Managers and contractors to promote compliance with applicable environmental regulations, permits, project plans, specifications, environmental commitments, and MDT and ESB policies and procedures.
- Reviews environmental permit conditions and environmental special conditions within the
 contract document. Conducts reviews of preliminary bid packages for environmental issues that
 could affect constructability and construction activities. Develops suggested revisions, edits or
 additions to plans and special provisions and coordinates with other ESB personnel regarding
 their insertion in the contract documents.
- 3. Participates in Pre-Construction Conferences to provide information and guidance regarding contract design features and special provisions related to environmental issues, environmental permit requirements for permanent and temporary facilities, and applicable environmental rules and regulations. This work will include preliminary information sharing to facilitate efficient Stream Protection Act (SPA) Notification, 318 Authorization, Construction Dewatering and Clean Water Act (CWA) permitting related to temporary facilities and construction practices.
- 4. The position is responsible for reviewing and evaluating Contractors' SPA 124 and CWA Section 404 permit applications for temporary facilities and construction activities. As necessary, the review will include suggestions for modifications to facilitate effective, efficient securing of Contractors' temporary facilities and construction permits in compliance with applicable laws. This position will coordinate with regulatory agencies to address questions or concerns regarding the permit applications and assist the Field Services Engineer in agency

discussions to negotiate and/or clarify permit conditions, as necessary. This position will coordinate with field staff and/or Contractors to review permit conditions and promote proper implementation of and compliance with those conditions.

- 5. In coordination with the EPM, conducts on-site reviews to promote compliance with environmental permits, commitments, policies, procedures and applicable regulatory requirements, as well as for adherence to environmental-related standard specifications and special provisions. Monitors the effectiveness of environmental performance and procedures and makes recommendations to enhance environmental compliance, efficiency or cost effectiveness. Coordinates with contractors through the EPM and project staff to resolve problems at the lowest level possible. Assists construction personnel with issues related erosion and sediment control Best Management Practices (BMPs) for purposes of complying with FHWA funding requirements.
- 6. Coordinates with District personnel and Contractors to participate in Final Construction Inspection for Project Close-out to confirm environmental compliance to facilitate storm water permit transfers from the contractor or endorse the contractor's termination of storm water permit. Investigates contractor recordkeeping and compliance history to assess risk to the Department (or local agency) associated with permit transfer. If the Contractors' permit is to be transferred to a local agency, this position will provide technical assistance to local agency personnel if needed.
- 7. Coordinates with District personnel to conduct on-site reviews to ensure uniform contract administration measures related to environmental permitting, water quality protection, storm water management, and other project elements to ensure compliance with contract documents, applicable environmental regulations, and requirements for federal aid. Monitors the effectiveness of contract administration policy and procedures and makes recommendations to improve efficiency or cost effectiveness. Provides input into the development of contract administration measures related to environmental matters.
- 8. Coordinates or conducts investigations of actual or potential environmental compliance deficiencies during construction. Recommends measures and practices to rectify deficiencies. This involves coordinating with other ESB staff, road and bridge designers, materials engineers, and other specialists required for deficiency investigations, reporting on findings, and recommending mediation and/or enforcement actions. As necessary, prepares documentation of potential non-compliance or assists the contractor is preparing documentation of potential non-compliance to ensure reporting of potential non-compliance events in accordance with MDT policy and applicable requirements.
- 9. Develops alternatives and innovative approaches to complex engineering problems (e.g., unexpected site or environmental conditions, design flaws, safety concerns, etc.) to promote compliance with environmental regulations and permits. This involves advanced engineering design, research, and coordination among various department work units and environmental regulatory agencies to identify and resolve construction or design deficiencies.
- 10. Develops and promotes uniform contract administration measures related to BMPs to ensure full compliance with all requirements for federal aid. Monitors the effectiveness of contract administration policy and procedures and make recommendations to improve efficiency or cost effectiveness.
- 11. Provides advice and guidance to District personnel on the evaluation and analysis of contract claims related to environmental matters. This involves researching, compiling, and presenting pertinent information in professional and accessible formats; conducting investigations of claims,

- plans, and specifications; documenting findings; developing legally defensible conclusions; and recommending appropriate actions.
- 12. Provides environmental compliance advice, guidance and training to District staff in regard to water quality protection; storm water permitting; erosion and sediment control BMP implementation, inspection, and maintenance; temporary facilities and construction activity permitting; etc.
- 13. Correspond with regulatory agencies to obtain or furnish information regarding construction projects.
- 14. This position will function as a liaison between Field construction crews and other ESB personnel to foster effective communications. Serve as a contact and information point for district staff on environmental permitting for construction activities and temporary facilities.
- 15. Reviews requests for change orders and provide input regarding additional environmental permitting or review that may be triggered. Coordinates with other ESB personnel regarding the need for additional or modified permitting related to permanent facilities environmental documents, clearances, and permits.

B. MAINTENANCE ENVIRONMENTAL COMPLIANCE ASSISTANCE 40%

- 1. The position is responsible for evaluating proposed activities to be conducted by MDT maintenance personnel for purposes of determining applicable environmental permitting, suggesting alternative means of accomplishing the maintenance work to minimize permitting responsibilities and enforcement risks, and ultimately preparing the permit joint application form in compliance with Federal, State and local regulations for ESB submittal. As necessary, this position will coordinate with regulatory personnel to address questions or concerns regarding the permit applications and to negotiate and/or clarify permit conditions. This position will coordinate with maintenance staff to review applicable laws and permit conditions and promote proper implementation of and compliance with those laws and conditions.
- 2. This position will function as a liaison between maintenance personnel and other ESB personnel to foster effective communications and facilitate necessary environmental reviews such as Montana Environmental Policy Act (MEPA) compliance, protection of biological resources, and remediation of spill or hazardous material sites. As requested by Maintenance personnel, assist with preparation of environmental checklists for submittal to ESB. As requested by other ESB personnel, conduct on-site reviews of locations of proposed approach, utility or encroachment permit applications.
- 3. This position is responsible for developing Storm Water Pollution Prevention Plans (SWPPPs) for maintenance activities in accordance with Montana and National Pollution Discharge Elimination System (MPDES and NPDES) Construction General Permit requirements. This position is responsible for preparing the NOI for ESB submittal and overseeing Maintenance administration of these permit requirements including SWPPP updates, inspections, BMP installation and maintenance and revegetation efforts. This position is responsible for conducting annual inspections as applicable and for preparing the final stabilization report for Storm Water Permit termination. Prepares Notice of Termination (NOT) packets for Environmental Services Bureau Chief signature.
- 4. Coordinates with District Maintenance personnel to conduct on-site reviews to promote compliance with environmental permits and applicable regulatory requirements. Monitors the effectiveness of environmental performance and procedures and makes recommendations to enhance environmental compliance, efficiency or cost effectiveness.

- 5. Coordinates or conducts investigations of actual or potential environmental compliance deficiencies during maintenance activities. Recommends measures and practices to rectify deficiencies. This involves coordinating with other ESB personnel, road and bridge designers, materials engineers, and other specialists required for deficiency investigations, reporting on findings, and recommending mediation and/or enforcement actions. As necessary, coordinates with ESB and Resource Agencies and prepares documentation of potential non-compliance to ensure reporting of potential non-compliance events in accordance with MDT policy and applicable requirements.
- 6. Coordinate with other ESB personnel and district staff to identify appropriate locations for implementation of Federal Revegetation Management Program funds. As requested by other ESB personnel, the DA or District Preconstruction Engineer, assist with on-site reviews, contractor selection, work assignments, and contractor oversight.

C. OTHER DUTIES 20%

- This position performs a variety of other duties as assigned by the Environmental Services Bureau Chief, Engineering Section Supervisor, DA or District Preconstruction Engineer, or as proposed by the incumbent in support of the Department mission and Section objectives. This work includes exchanging information with agency staff, professional consultants, and the public; providing training, education, and professional and technical assistance; directing special projects; participating in ongoing training and educational programs; and performing a variety of other duties as directed.
- 2. This position is required to have a working knowledge of a wide variety of environmental regulations, rules, and permits in order to serve as a first point of contact for district field staff and to coordinate with and provide support for ESB operations and activities.
- 3. Provides input into the direction, planning, and coordination of MDT's storm water, and environmental permitting and compliance programs, and related operations and activities for the District. Participates in the development of short and long-term Field Services plans and program objectives to ensure that they comply with local, State, Federal, and Tribal standards in a cost-effective manner. This work involves assessing current water quality standards, regulations, preventative or corrective action strategies; construction project needs for the District; changing technologies and project requirements; permitting processes; and a variety of other issues. The incumbent synthesizes these assessments and analyses to assist in the development of long-term implementation strategies through coordination with the ESB Engineering Services Section staff, other Section, Bureau and Division staff, and supervisors as well as state and federal agencies (e.g., FHWA, EPA, DEQ, FWP, COE, etc.).
- 4. Participates in the development of ESB Engineering Section's Field Services program policies, procedures, guidelines, standards, to ensure that the District's interests, recommendations and concerns are given the appropriate level of consideration in their development. Assesses changes in state and national environmental trends and standards and applies them to MDT and the contractors' practices and standards in a manner that will meet specific and variable construction project needs. Understands new technologies, and other changing factors to develop new approaches to policy and program issues.
- 5. Analyzes and evaluates changes in local, State, Federal, and Tribal water quality requirements and incorporates them into ongoing MDT Field Services programs and district projects. Typical State and federal regulations that the incumbent must be familiar with include the Clean Water Act (CWA), National Pollutant Discharge Elimination System (NPDES), Montana Pollutant Discharge Elimination System (MPDES), the Montana Water Quality Act, Montana Stream Protection Act, State and National Environmental Policy Acts, and others. New technologies.

construction practices, and unusual or unprecedented site characteristics require innovative and theoretical application of environmental engineering concepts and principles to ensure effective integration and application of these requirements.

- 6. Provides input into the Department's statewide erosion and sediment control strategies, programs and guidelines by assisting in the definition of standards, objectives, and procedures. Participates in the development of innovative approaches to water quality protection issues as they relate to erosion and sediment control, storm water pollution prevention, and MDT activities while providing for efficient and cost-effective construction and maintenance processes and methods.
- 7. Represents the ESB, District and MDT at public and professional meetings and conferences.; Represents the ESB and District at MDT work groups to provide coordination with other programs, ensure that the District's goals and objectives are effectively represented, and provide professional expertise and advice.
 - 1. The following duties and/or specific tasks listed under section II above are considered "essential functions" because they require specialized expertise and skill and are the primary reasons the job exists (they must be performed by this position with or without accommodations):

The following mental and physical demands are associated with these essential functions:

PHYSICAL

This position requires travel throughout the state typically in excess of 12,000 miles per year
to conduct project reviews, inspections, and site evaluations; attend public/project meetings;
and meet with government officials. This position requires working in adverse weather
conditions on all types of terrain, lifting and transporting supplies in proximity to heavy
equipment, hot asphalt, and high speed traffic. Enforcement activities and investigations
may lead to confrontational situations.

MENTAL

- This position requires travel throughout the state typically in excess of 12,000 miles per year
 to conduct project reviews, inspections, and site evaluations; attend public/project meetings;
 and meet with government officials. Enforcement activities and investigations may lead to
 confrontational situations.
- 2. Does this position supervise others? Yes No
- 3. Attach an Organizational Chart.

SECTION III - Minimum Qualifications - List minimum requirements for the first day of work.

Critical knowledge and skills required for this position:

KNOWLEDGE: Incumbent will need a working knowledge of transportation construction and maintenance activities and local, state, federal, and tribal water quality regulations, standards, and requirements; statewide construction project needs and processes; Department objectives; and practical environmental engineering applications to implement erosion control and permitting programs required for critical federal funding. Other problems involve site-specific environmental issues, unique

construction requirements, and politically or technically contentious issues associated with construction project objectives and water quality regulations.

This position requires extensive knowledge of accepted and developmental theories, concepts, and principles of civil and environmental engineering and environmental resources as they relate to environmental resource management, water quality protection, and erosion and sediment control as well as related mathematics and physical sciences (e.g., hydrology, geotechnical analysis, soil mechanics, etc.). The position also requires knowledge of the methods and practices of highway construction; engineering and design; and related policies, methods, procedures, specifications, standards, and regulations; advanced research methods and techniques; environmental permitting processes and requirements; applicable state, federal, AASHTO, and FHWA requirements and standards; applicable state, federal, and tribal laws and permit requirements.

SKILLS: The incumbent must be able to effectively manage multiple tasks and prioritize those tasks based on critical risk assessment capabilities. The incumbent must communicate well with a wide variety of audiences. The incumbent must be able to work well independently and as part of a team.

Behaviors required to perform these duties:

1-year related college/voc. training

See MDT Core Behaviors

Education:

Check the one box indicating minimum education requirements for this position for a new employee the first day of work:

No education required
High school diploma or equivalent
Related AAS/2-years college/vocational training
Related Bachelor's Degree

Please specify the acceptable fields of study: The required Knowledge, Skills and Abilities are typically acquired through a combination of education and experience equivalent to a bachelor's degree in Environmental Engineering or another related field. Examples of related degrees include Civil Engineering and Construction Engineering.

Related Master's degree

Other education, training, certification, or licensing required (specify): A passing score on the Fundamentals of Engineering exam (FE) is required.

Experience:

Check the <u>one box</u> indicating minimum work-related experience requirements for this position for a new employee the first day of work:

No prior experience required		3 years
1 year	V	4 years
2 years		5 or more years

Other specific experience (optional): Four (4) years of progressively responsible experience in civil, construction and/or environmental work. Experience in transportation is preferred.

This	agency will accept alternative methods of obtaining n	ecess	sary qualifications.
	Yes No		
Alte	rnative qualifications include: N/A		
SEC	CTION IV – Other Important Job Information		
	Fingerprint check	V	Valid driver's license
	Background check		Other; Describe

Other information including working conditions such as shifts, lifting requirements, travel or hours. This position requires travel throughout the District typically in excess of 12,000 miles per year to conduct project reviews, inspections, and site evaluations; attend public/project meetings; and meet with government officials. Extended working hours and unusual shifts are required to meet project deadlines.

SECTION V – Signatures		
Signature indicates this statement is accur-	ate and complete.	
Employee:		
Name:	Title:	
Signature:	Date:	
Immediate Supervisor:		
Name:	Title:	
Signature:	Date:	
Bureau Chief:		
Name:	Title:	
Signature:	Date:	
Division/District Administrator:		
Name:	Title:	
Signature:	Date:	
Department Designee:		
Brent Rabe	Chief Human Resources Officer Human Resources Division	
Signature:	Date:	